

310 CMR 7.00: AIR POLLUTION CONTROL

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## 7.00 DEFINITIONS

When used in 310 CMR 7.00 or in communications, notices or orders relative thereto, the following words and phrases shall have the meanings ascribed to them below:

...

~~COMPOUND EMISSION RATE: for the purpose of 310 CMR 7.22 means the sum of all sulfur dioxide (SO<sub>2</sub>) emissions from the fuels burned at any fuel utilization facility(ies) included in the emission rate, divided by the sum of all Btu inputs of said fuel(s). All emission credits generated under an approved control plan shall be included in calculating the average. It shall be calculated annually for the period January 1<sup>st</sup> through December 31<sup>st</sup>.~~

...

EMISSION CONTROL PLAN means a plan approved by the Department which details the methods and schedules which will be used in order to achieve compliance with an emission limit imposed in 310 CMR 7.00. (e.g. 310 CMR 7.18 or, 310 CMR 7.19 ~~or 310 CMR 7.22~~)

...

~~ENERGY CONSERVATION MEASURE: for the purpose of 310 CMR 7.22 means non-load management measures, applied to the production or use of electricity, that accomplish a more efficient use of energy resources.~~

...

FUEL means any solid, liquid, or gaseous material such as, but not limited to, coal, gasoline, manufactured gas, natural gas, oil, or wood, used for the production of heat or power by burning.

~~ALTERNATIVE FUEL for the purposes of 310 CMR 7.22 means any non fossil fuel including but not limited to wood or biomass; nuclear fuel is not included in this definition.~~

COAL means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388-77, standard specification for classification of coals by Rank, coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures.

DISTILLATE FUEL OIL means No. 1 or No. 2 fuel oil. Distillate fuel oil having a sulfur content of 0.17 pounds of million Btu heat release potential is approximately equal to distillate fuel oil having a sulfur content of 0.3% by weight.

FOSSIL FUEL means coal, coke, distillate oil, residual oil, used oil fuel or natural or manufactured gas.

-HAZARDOUS WASTE FUEL means a regulated recyclable material, other than waste oil, and other than a material that [i] has the hazardous waste characteristics set forth in 310 CMR 30.120 through 30.125, [ii] has waste oil as a significant ingredient, and [iii] does not have as an ingredient any hazardous waste, other than waste oil, listed or otherwise identified in 310 CMR 30.130 through 30.136,

1. that is recycled by being burned for energy recovery in an industrial or utility boiler or in an industrial furnace, but not in a hazardous waste incinerator licensed pursuant to 310 CMR 30.800 and 310 CMR 7.08 and

2. that is:

a. presumed to be hazardous waste fuel pursuant to 310 CMR 30.215,

b. a mixture of

(i) any hazardous waste, other than waste oil, or of any material presumed to be hazardous waste fuel pursuant to 310 CMR 30.215, with

(ii) any other material (including, without limitation, waste oil, any other hazardous waste, any material presumed to be hazardous waste fuel pursuant to 310 CMR 30.215, specification used oil fuel, off-specification used oil fuel, unused commercial fuel oil, unused commercial crude oil, or any hazardous or non-hazardous material burnable as fuel), and

3. that is managed in compliance with 310 CMR 30.200.

-NATURAL GAS means

1. a naturally occurring mixture of hydrocarbon and nonhydrocarbon gas found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

2. liquefied petroleum gas, as defined by the American society of Testing & Materials in ASTM D1835-97, "Standard Specification for Liquefied Petroleum Gases"

-RESIDUAL FUEL OIL means No. 4, No. 5, or No. 6 fuel oil. Residual fuel oil having a sulfur content of 0.55 or 0.28 pounds per million Btu heat release potential is approximately equal to residual fuel oil having a sulfur content of 1.0 or 0.5% by weight respectively.

-USED OIL FUEL means a regulated recyclable material

1. that is recycled by burning for energy recovery, and

2. that is:

a. a waste oil, or

b. any fuel, other than hazardous waste fuel, produced from waste oil by processing, blending, or other treatment, and

3. that is managed in compliance with 310 CMR 30.200.

-WOOD FUEL means all wood intended to be used as a fuel included but not limited to trees, cord wood, logs, lumber, saw dust, and wood from: manufacturing processes (but offs, shavings, turnings, sander dust, etc.), wood pellets, slabs, bark, chips, waste pallets, boxes, etc. This definition does not include materials which are chemically treated with any preservative, paint, or oil.

...

FUEL UTILIZATION FACILITY means any furnace(s), fuel burning equipment, boiler(s), space heaters or any appurtenance thereto used for the burning of fuels, for the emission of products of combustion, or in connection with any process which generates heat and emits products of combustion, but does not mean a motor vehicle or an incinerator; ~~except that for the purposes of 310 CMR 7.22, means a single furnace, fuel burning equipment, boiler or space heater for the purpose of generating electricity or thermal energy.~~

...

NEW VEHICLE means any passenger car or light duty truck with 7,500 miles or fewer on its odometer. ~~As used in 310 CMR 7.45: NEW VEHICLE means any motor vehicle not previously titled for registration.~~

...

~~NON-COMBUSTION ENERGY SOURCE: for the purpose of 310 CMR 7.22 means a facility which does not rely on the burning of fossil or alternative fuel to produce electricity, such as wind, solar or geothermal. Sources regulated by the NRC or utilizing nuclear fuel are not included in this definition.~~

7.17 U Conversions to CoalReserved

- ~~(1) Sulphur Content, Emission Limitations and Control Thereof. Notwithstanding the provisions of 310 CMR 7.02(8)(d) Table 4 or 5 and 310 CMR 7.05(1), facilities specified in 310 CMR 7.17(2) may utilize solid fossil fuel (coal) as the fuel of use, provided that the following general conditions are met:~~
- ~~(a) Application for approval to utilize such fuel has been made to the Department under the provisions of 310 CMR 7.02 and said application has been approved by the Department in writing.~~
  - ~~(b) All solid fuel burning shall be conducted strictly in accordance with the application as approved by the Department and in conformance with applicable laws and regulations not specifically excepted.~~
- ~~(2) Facilities Allowed to Utilize Solid Fossil Fuel. (Coal Facilities named herein may use coal as the fuel of use, provided that the following specific conditions are met:~~
- ~~(a) New England Power Company, Brayton Point Station, Somerset, Massachusetts: on and after November 1, 1978 and prior to November 1, 1988, Units 1, 2 and 3 provided that:~~
    - ~~1. Such fuel shall have an average sulfur content not in excess of 1.21 pounds per million Btu heat release potential for any monthly period, nor exceed 2.31 pounds per million Btu heat release potential in any day, as measured in accordance with procedures prescribed by the Department.~~
    - ~~2. Emissions of particulate matter from the facility shall be limited to a maximum of 0.08 pounds per million Btu input as measured by testing conducted under isokinetic sampling conditions and in accordance with Environmental Protection Agency test methods 1 through 5 as specified in the CFR, Title 40, Part 60, Appendix A Standards of Performance for New Stationary Sources or by another method correlated to the above method to the satisfaction of the Department.~~
  - ~~(b) Holyoke Water Power Company, Mt. Tom Power Plant, Holyoke, Massachusetts:~~
    - ~~1. Such fuel shall comply with the requirements contained in 310 CMR 7.05(1)(b).~~
    - ~~2. Emissions of particulate matter from the facility shall be limited to a maximum of 0.08 pounds per million Btu input as measured by testing conducted under isokinetic sampling conditions and in accordance with Environmental Protection Agency test methods 1 through 5 as specified in the CFR, Title 40, Part 60, Appendix A Standards of Performance for New Stationary Sources or by another method correlated to the above method to the satisfaction of the Department.~~

7.21: ~~Sulfur Dioxide Emissions Limitation~~Reserved

~~(1) Definitions: For the purpose of 310 CMR 7.21:~~

~~Calendar Year or "data year" means two years prior to the current year.~~

~~CAP means the average of total statewide actual annual sulfur dioxide (SO<sub>2</sub>) emissions in the years 1979 to 1982 inclusive.~~

~~Current Year means the present year.~~

~~Four Year Average means the average of statewide actual sulfur dioxide emissions for the data year and the three years previous to the data year.~~

~~Projection Average means any consecutive four year average of statewide expected sulfur dioxide emissions within the time period two years prior to the data year through the following seven years (e.g. if the data year was 1983, the time period would be 1981 to 1988).~~

~~Trigger means the level of sulfur dioxide emissions that is ten thousand tons lower than the average of total statewide actual annual SO<sub>2</sub> emissions from 1979 to 1982, the cap.~~

~~(2) The Department of Environmental Protection, hereafter "the Department", is promulgating a limitation on the total statewide actual annual sulfur dioxide emissions in accordance with St. 1985, c. 590. There is hereby established a statewide cap on sulfur dioxide emissions of 417,000 tons of emissions and a statewide sulfur dioxide trigger of 407,000 tons of emissions.~~

~~(3) By July 1 of each year, the Department shall prepare and make available to the public a report which will:~~

~~(a) Determine the statewide actual sulfur dioxide emissions for the calendar year (hereinafter referred to as the data year).~~

~~(b) Determine the average (hereinafter referred to as the four year average) of statewide actual sulfur dioxide emissions for the data year and the three years previous to the data year.~~

~~(c) Compare the amount of actual emissions for the data year to the trigger.~~

~~(d) Compare the amount of actual emissions for the four years average to the cap.~~

~~(e) Contain an explanation of the calculation methods and data sources used by the Department in preparing such a report.~~

~~(f) Determine whether the Department will prepare a second report as specified in 310 CMR 7.21(4) and if so, contain an explanation of the methods the Department will use to project emissions as required by 310 CMR 7.21(4)(c).~~

~~(4) If the amount of emissions from the data year exceeds the trigger or if the amount of emissions from the four year average exceeds the cap, then the Department shall, by December 31 of the current year, prepare a draft of a second report which shall:~~

~~(a) Explain why, in the opinion of the Department, the sulfur dioxide trigger or cap was exceeded.~~

~~(b) Determine whether the trigger or cap exceedance is temporary or may be~~

~~expected to continue indefinitely.~~

~~(c) Project the statewide expected sulfur dioxide emissions for each year for the time period ranging from the data year through the following five years. In preparing this projection, the Department will consider, among other things, future energy use, the sources expected to provide that energy and such other things which the Department may decide appropriate. This may include information such as the availability of future energy sources, the scheduling of power plant operations and outages, power plant dispatch schedules, types of fuel, and conservation improvements.~~

~~(d) Determine whether the projections required by 310 CMR 7.21(4)(c) indicate that any consecutive four year average (hereinafter called a projection average) of statewide expected sulfur dioxide emissions within the time period two years prior to the data year through the following seven years will exceed the cap.~~

~~(e) Develop a schedule and plan for initiating the actions pursuant to St. 1985, c. 590, §§ 4 and 5 to reduce any projection averages that exceed the cap to a level that is equal to or less than the cap.~~

~~(5) After preparing a draft of the second report, the Department shall:~~

~~(a) Hold a public hearing on the draft of the second report pursuant to St. 1985, c. 590, § 4 to receive comments on the projections determined pursuant to 310 CMR 7.21(4)(c) and the schedule and plan developed pursuant to 310 CMR 7.21(4)(e) by March 1 of the year following the first report.~~

~~(b) After receiving public comment, and after responding to said comments on the draft second report, the second report shall be made final by June of the year following the first report.~~

~~(6) If after public hearing and comment, the second report shows that: a) the amount of emissions from the data year exceed the trigger and one or more projection averages exceed the cap; or b) the amount of emissions from the four year average exceeds the cap and one or more projection averages exceed the cap, the Department will:~~

~~Adopt such further regulations as may be necessary to insure that any future four year average, as calculated pursuant to 310 CMR 7.21(4)(c), does not exceed the level of the cap.~~

7.22: Sulfur Dioxide Emissions Reductions for the Purpose of Reducing Acid Rain~~Reserved~~

~~(1) On or after December 31, 1994, no person owning, operating, leasing or controlling the operation of a fossil or alternative fuel utilization facility of a capacity to burn fuel at a rate greater than or equal to 100,000,000 Btus of fuel input per hour; hereafter referred to as "facility", shall cause, suffer, allow or permit the compound emission rate from said facility to exceed an annual calendar average of 1.2 pounds of sulfur dioxide (SO<sub>2</sub>) per 1,000,000 Btu of fuel input.~~

~~(2) On or before January 1, 1991 any owner or operator of a facility which exceeds the emission limitation required in 310 CMR 7.22(1), hereafter referred to as an "affected facility", shall submit to the Department for approval an emission control plan, hereafter referred to as "control plan", detailing the method and schedule by~~

~~which said affected facility shall achieve and maintain compliance with the emission limitation set forth in 310 CMR 7.22(1).~~

~~(a) The proposed control plan shall contain sufficient documentation and guarantees from appropriate suppliers, contractors, manufacturers or fabricators in support of the proposed plan such that the schedule submitted shall achieve compliance with the emission limitation contained in 310 CMR 7.22(1).~~

~~(b) For the purpose of compliance with 310 CMR 7.22(2) only facilities of a capacity to burn fuel at a rate greater than or equal to 100,000,000 Btus of fuel input per hour may be incorporated in any proposed control plan.~~

~~(3) The control plan submitted pursuant to 310 CMR 7.22(2) must demonstrate a commitment to compliance utilizing one, or a combination of the following methods:~~

~~(a) persons owning, operating, leasing or controlling an affected facility may submit a control plan such that the compound emission rate of said facility is less than or equal to the emission limitation as described in 310 CMR 7.22(1).~~

~~(b) persons operating or controlling an affected facility seeking to average the compound emission rate of said facility with one or more facilities located, operated or controlled by said persons within the Commonwealth, may submit a control plan, such that the compound emission rate of said facilities is less than or equal to the emission limitation as described in 310 CMR 7.22(1).~~

~~(c) persons operating or controlling an affected facility seeking to engage in emission trading with another person operating or controlling a facility within the Commonwealth, may submit a control plan such that the sum of the SO<sub>2</sub> emissions used in calculating said affected facility's compound emission rate, minus the actual emission reduction credit in pounds of SO<sub>2</sub> obtained through emission trading, achieves a compound emission rate less than or equal to the emission limitation as described in 310 CMR 7.22(1).~~

~~(d) persons operating or controlling an affected facility seeking to receive emission reduction credit for reduced fossil fuel use as a result of energy conservation measures implemented within the Commonwealth, may submit a control plan so as to receive full emission reduction credit for such conservation measures as are put into service after January 1, 1989 and before December 31, 1994 at a rate of 10,000 Btus per kilowatt hour of energy saved, added to the sum of the Btus used in calculating said affected facility's compound emission rate.~~

~~(e) persons operating or controlling an affected facility seeking to receive emission reduction credit for utilizing non-combustion energy sources located within the Commonwealth may submit a control plan so as to receive full emission reduction credit for such energy sources as are put into service after January 1, 1989 and before December 31, 1994 at a rate of 10,000 Btus per kilowatt hour of energy produced, added to the sum of the Btus used in calculating said affected facility's compound emission rate.~~

~~(f) persons operating or controlling an affected facility seeking to receive emission reduction credit for measures which utilize a cogeneration~~



~~technology, implemented after January 1, 1989 and before December 31, 1994, for the simultaneous production of electricity and thermal energy from a single fuel input may submit a control plan so as to receive full emission reduction credit for reduced fuel use upon demonstration that said technology uses fuels more efficiently than a reasonable combination of comparable state-of-the-art technologies separately generating electric and thermal energy. Emission reduction credit in millions of Btu will be added to the sum of the Btus used in calculating said affected facility's compound emission rate.~~

- ~~(4) (a) Upon written Department approval of a submitted control plan and schedule, persons owning, operating, leasing or controlling an affected facility shall submit regular progress reports; submittal dates, content, and format of which will be determined by the Department at the time of control plant approval.~~
- ~~(b) Upon compliance with 310 CMR 7.22(1) persons owning, operating, leasing or controlling an affected facility shall submit on an annual basis an emissions compliance report; the submittal date, content, and format of which will be determined by the Department at the time of control plan approval.~~
- ~~(5) The Department shall determine compliance with the emission limitation approved for an affected facility through emissions compliance reports as described in 310 CMR 7.22(4)(b), emissions testing in accordance with the applicable procedures described in ANSI/ASTM D129 (Bomb method) and/or EPA Method No. 6 as described in 40 CFR 60 Appendix A as amended, or by another method which has been approved by the Department.~~
- ~~(6) Nothing in 310 CMR 7.22 shall be deemed to reduce or revoke the responsibility of any person regulated hereunder from complying with 310 CMR 7.00 et seq. and all terms of any permit(s) issued by the Department pursuant to 310 CMR 6.00 through 8.00.~~
- ~~(7) 310 CMR 7.22 will be enforced in accordance with applicable law.~~

7.45: The Massachusetts Green Fleet Program Reserved

(1) U Applicability.

~~(a) Under the authority of M.G.L. c. 111, §§ 142A through M, the Department of Environmental Protection (the Department) hereby adopts the Massachusetts Green Fleet program, applicable to the purchase and lease of new vehicles by the Commonwealth of Massachusetts for use in the state motor vehicle fleet.~~

~~(b) New vehicles exempt from the requirements of 310 CMR 7.45 include: emergency, test and non-road vehicles.~~

(2) Program Requirements.

~~(a) The Executive Office of Administration and Finance, Operational Services Division (OSD) shall purchase or lease, to the extent available and practical, new alternative fuel vehicles for use by all state executive offices, agencies and departments in compliance with the schedule below:~~

- ~~1. By no later than July 1, 1997 at least 10% of all new non-exempt vehicles purchased or~~
  - ~~2. by no later than July 1, 1998 at least 15% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 5% of the total new non-exempt vehicles purchased or leased shall be zero emission vehicles (ZEVs).~~
  - ~~3. By no later than July 1, 1999 at least 25% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 5% of the total non-exempt vehicles purchased or leased shall be ZEVs.~~
  - ~~4. By no later than July 1, 2000 at least 50% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 10% of the total non-exempt vehicles purchased or leased shall be ZEVs.~~
  - ~~5. By no later than July 1, 2001 and subsequent years, at least 75% of all new non-exempt vehicles purchased or leased shall be alternative fuel vehicles. At least 10% of the total non-exempt vehicles purchased or leased shall be ZEVs.~~
- ~~(b) New alternative fuel vehicles purchased or leased in compliance with the requirements of 310 CMR 7.45(2)(a) shall meet the following applicable motor vehicle emission standards:~~
- ~~1. Light duty vehicles less than or equal to 6000 lbs. gross vehicle weight (GVW), shall be certified, consistent with the requirements of 310 CMR 7.40, to one of the following category of motor vehicle emission standards:
    - ~~a. inherently low emission vehicle (ILEV);~~
    - ~~b. ultra low emission vehicle (ULEV); or~~
    - ~~c. zero emission vehicle (ZEV).~~~~
  - ~~2. Medium and heavy duty vehicles greater than 6000 lbs. GVW shall meet applicable motor vehicle emission standards no less stringent than the federal motor vehicle emission standards for an identical new vehicle operated on gasoline or diesel fuel.~~
- ~~(3) Compliance.~~
- ~~(a) Compliance with the requirements of 310 CMR 7.45(2)(a) shall be achieved through the purchase or lease of:
    - ~~1. new, original equipment alternative fueled vehicles; or~~
    - ~~2. new gasoline or diesel fueled vehicles which have been converted to an alternative fuel vehicle, if a California Air Resources Board certified alternative fuel system is installed and serviced by a manufacturer approved mechanic.~~~~
  - ~~(b) Compliance with the minimum purchase requirements of 310 CMR 7.45(2)(a) shall be calculated based on all new vehicles purchased or leased by the Commonwealth of Massachusetts.~~
  - ~~(c) State executive offices, agencies or departments who, prior to the effective date of 310 CMR 7.45, required the purchase or lease of alternative fueled vehicles, on a schedule earlier than, or in excess of, the requirements of 310 CMR 7.45(2)(a), and which comply with the requirements of 310 CMR 7.45(2)(b) and 310 CMR 7.45(3)(a),~~

~~shall be applicable towards compliance with the requirements of 310 CMR 7.45(2)(a).~~

~~(d) To further the goal of effective introduction of alternative fuel vehicles statewide, exempt vehicles and vehicles purchased or leased by a municipality or state authority that voluntarily satisfy the requirements of 310 CMR 7.45(2)(b) and 310 CMR 7.45(3)(a) shall be accounted for, in addition to, the annual requirements of 310 CMR 7.45(2)(a).~~

~~(4) Testing Requirements. New vehicles purchased in compliance with the requirements of 310 CMR 7.45(2)(b), shall receive and pass a safety and applicable air pollutant emission test prior to registration and regularly thereafter to ensure proper vehicle maintenance and air quality benefit.~~

~~(5) Reporting Requirements.~~

~~(a) Within 90 days of the annual compliance date required under 310 CMR 7.45(2)(a), OSD shall submit to the Department, a compliance report for the purpose of ensuring compliance with the requirements of 310 CMR 7.45. Said compliance report shall include:~~

~~1. the number and type of all new light, medium and heavy duty alternative fueled vehicles~~

~~purchased or leased in the previous fiscal year in compliance with 310 CMR 7.45(2)(a); and~~

~~2. the share new alternative fueled vehicles purchased in compliance with 310 CMR 7.45 represent, as a percentage, of all new vehicles purchased by the Commonwealth of Massachusetts.~~

~~(6) Enforcement. The Department shall enforce the requirements of 310 CMR 7.45 per M.G.L. c. 21A and M.G.L. c. 111, §§ 142A through M.~~